

to inhibit the biosynthesis of prostaglandins. Preferential inhibition of prostaglandin E synthesis in the lung, permitting the action of prostaglandin $F_{2\alpha}$, a potent bronchoconstrictor, to remain unopposed, would explain the asthmatic response. The mechanism underlying urticaria and angioedema provoked by aspirin could be a different one, although the role of prostaglandins has not been excluded. In many patients with chronic urticaria, aspirin seems to act as a nonspecific potentiator. The results of experiments to study the effect of tartrazine, benzoates and sulfur dioxide on prostaglandin biosynthesis will be eagerly awaited.

Feingold has proposed that many unspecified food additives and "natural salicylates" may cause hyperactivity and learning disabilities in some children. This theory has gained popular support, but several recent controlled studies of his additive- and salicylate-free diet have shown equivocal or no improvement in children with these disorders.

Food additives, numbering in the thousands, are widely employed to alter the color, taste, and texture of the food and to preserve freshness and inhibit contamination. It is therefore not surprising that some patients may exhibit idiosyncrasy or allergy to one or more of these substances.

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The Use of Antihistamines in Bronchial Asthma

ANTI-HISTAMINES have been considered to provide either no benefit or even to be contraindicated in all asthmatic patients. However, recent studies have shown that these drugs do not necessarily cause a deterioration of the asthmatic state, and in fact may provide benefit. Antihistamines not only block H_1 receptors and thus partially block allergen induced bronchospasm, but they appear to have an anticholinergic effect as well. Poppa has reported that high doses of chlorpheniramine given intravenously result in a significant degree of bronchodilation in asthmatic patients without atropine-like side effects. Furthermore, Karlin and co-workers have shown improved pulmonary function in patients with mild

asthma receiving twice the usual recommended dosage. No adverse effects were seen in patients with chronic severe asthma receiving antihistamines for coexisting allergic rhinitis or urticaria.

These recent studies warrant the following conclusions:

- Asthmatic patients with allergic rhinitis may safely receive antihistamines in the usual dosage, and there is no evidence that coexisting asthma will be exacerbated.
- Although antihistamines can improve asthma in some cases, their use in asthmatic patients must be established on an individual basis.
- The use of antihistamines in patients with status asthmaticus cannot be recommended at this time because of the existence of more effective drugs and because potential drying effect of antihistamines on bronchial mucus has not been firmly clarified.

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The Measurement of IgE

THE AMERICAN ACADEMY OF ALLERGY has appointed a Committee on Standardization of In Vitro Tests which is charged with defining and correcting the problems in the quantitation of IgE. They conducted a nationwide single-blind evaluation of the accuracy and reproducibility of the quantitation of IgE which showed an unacceptable level of variation. Besides the large variation between laboratories, the variation of repeated assays within laboratories was unacceptably large.

Part of the problem is undoubtedly due to differences in assay methods. A study of the various assay methods—radioimmunosorbent test (RIST), double-antibody radioimmunoassay (RIA), radial immunodiffusion (RID) and paper disc immunosorbent test (PRIST)—shows that RIST and RID may lead to spurious elevations of IgE in sera and secretions. Double-antibody RIA and PRIST provide the best agreement, but PRIST may give deceptively low results in certain sera. When all 14 laboratories assayed the test serum with the PRIST kit, variations within and between laboratories (133 units per ml to 330 units per ml) were still more than $2\frac{1}{2}$ fold. The problems of the quantitation of IgE are being resolved and a "predictive" table of serum IgE levels in infants,